2: Boissevain E-5 (1960-1961) 1965
EZ6 Malta EZ6

142
796
292
794

3. Confraternity members resting during procession

[facing p. 48]

2: Boissevain E-5 (1960-1961) 1965
EZ6 Malta EZ6

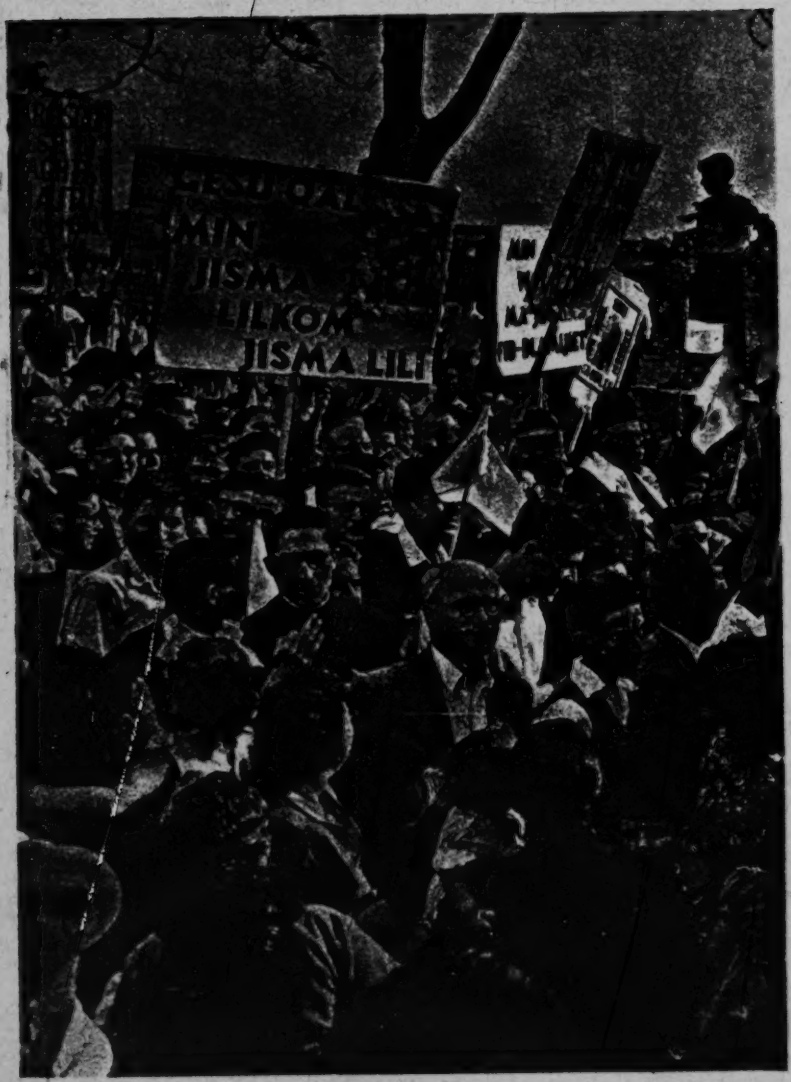
142
291
482
516
666

6. 'Viva San Ġużepp!'

[facing P. 81]

2: Boissevain E-5 (1960-1961) 1965
EZ6 Malta EZ6

793
794
212
142



7. Demonstrations of loyalty to the Archbishop

[facing P. 96]

2: Boissevain E-5 (1960-1961) 1965
EZ6 Malta EZ6

142
665

8. Labour Party supporters cheer Dom Mintoff

[facing p. 97]

3: Buxton D-5 (1920-1921) 1922 EZ6 Malta EZ6

1919, 14·18 inches were recorded at Casal Lia, and 19·44 at Naxaro. Unfortunately no comparative humidity data are available, but such a striking difference in rainfall argues that the inhabitants of those two places breathe an atmosphere which differs at least appreciably in moisture. Again, local variations in temperature, if not great, may prove significant. At the same two stations the annual means of temperature for that year were, maximum 71·5, minimum 56·8, mean 64·1 at Casal Lia, and 69·9, 53·7 and 61·8 respectively at Naxaro, a big difference if the total area of the archipelago is taken into consideration.

The differences in the upper facial height may be, and probably are, associated partly with the respiratory (including as it does the nasal height) and partly with the masticatory apparatus, and the same is true of the total facial height, which includes both the two last-mentioned factors. It is interesting to note that differences in the total facial height are always associated with differences in the bizygomatic breadth; differences in the upper facial, with differences in the nasal height. The converse, though true in the former case, is not true in the latter. The differences in the bigonial breadth accompany differences in the minimum frontal diameter on the two occasions where they occur, but the excessive minimum frontal diameter at Zurrico is not associated with any irregularity of the bigonial breadth. The differences in the external orbital breadth do not appear to have any particular associations.

Although no doubt it is possible that these local differences may be largely due to heredity as opposed to environment, it would seem not unlikely that the present rather insignificant differences, taken as a whole, may be ascribed to small variations in climatic and economic conditions, to most of which the people have been subjected for many generations.

The differences between the sexes in head form is difficult to estimate. Obviously we cannot compare the absolute measurements, because the female is built on a different scale from the male, and to reduce them to similar proportions would be to abandon certain fundamental anatomical principles. There remain, however, a comparison of the variations and the indices. The former do not present great differences. The nasal height and the external orbital breadth of the female are appreciably more variable. The bizygomatic breadth of the male has a significantly wider dispersion. It is possible that in the latter case the greater muscular development of the male may account for this variation. The exact significance of the striking differences between the indices is not apparent.

Pigmentation.

Pigmentation figures bring out a certain contrast already suggested by measurements, and fail to confirm others. The figures are, however, rather unsatisfactory, and it was not found practicable to make more than three divisions in hair or eye

3: Buxton D-5 (1920-1921) 1922 EZ6 Malta EZ6

142 colour, without risk of considerable confusion, where work had necessarily to be done, sometimes under ideal conditions, sometimes in glaring sunlight, and sometimes in the not too well-lighted interior of a Maltese house. Both in hair and eye colour Zurrico stands by itself. In that village one man in three has black hair, and two have brown. In the rest of Malta and Gozo the reverse is true. About 1 per cent. fair-haired people are found alike in Zurrico and elsewhere. In Zurrico two men out of three have brown eyes and there are slight odds in favour of the third man having hazel eyes rather than blue. In Siggewe, where black hair is slightly less common than elsewhere, out of ten men, five tend to have brown eyes, four hazel, and one blue. Elsewhere in Malta blue eyes are about twice as common, that is to say out of ten men five have brown eyes, three hazel, and two blue. It is perhaps worth [103] mentioning that the name Zurrico, connected with the root *azrak*, means blue, and I was told that the village was so called because blue eyes were more common there than elsewhere.

In Gozo, although the hair colour does not differ materially from that of Malta, in round numbers, out of ten men seven have brown eyes, two hazel, and one blue.

In Malta the hair colour of the women does not differ to any great extent from that of the men, although fair-haired women appear to be slightly more uncommon. Brown eyes, however, seem to be much commoner, and hazel and blue eyes about half as common. With so small a series, however, it is possible that this result is merely illusory.

Comparative material from the Eastern Mediterranean shows very great discrepancy with these data, especially in relation to the number of blue eyes, which are nearly twice as common in Malta as they are in Cyprus, and more than three times as common as they are in Crete. The number of fair-haired persons in Malta is small, smaller even than in Cyprus, whereas generally speaking fair-haired people, though always remarkable and much admired, are not uncommon in Greek lands, not only among gods and goddesses, but even among the ordinary folk.

It would be interesting to correlate these differences in pigmentation with differences in climatic conditions. Up to the present, however, we have not succeeded in finding any generalization which would fit the figures, and the matter must remain *sub judice* until further data is available.

141 142 We have so far been dealing with hair colour and eye colour separately. By the use of Parsons' index (36) it is possible to take both into consideration. Parsons takes the percentage of dark brown and black hair, adds the percentage of dark eyes, and divides the result by two. This final result he terms his colour index. Where the eyes have been graded in three shades, *e.g.* blue, neutral, and brown, or some similar classification, he includes half the neutral group as well as the brown eyes under the heading dark. As our eye colour was graded in this way we have

3: Buxton D-5 (1920-1921) 1922 EZ6 Malta EZ6

followed the above procedure. Parsons' indices for our material will then be :— 141 142

	♂	♀
Urban Districts	67·4	72·3
Rural Districts	67·7	73·1
Siggewe	66·3	—
Zurrico	54·2	—
Malta	67·5	74·9
Gozo	74·5	77·5

For comparative purposes we have worked out the Index of Pigmentation for some places in the Eastern Mediterranean. The values, which refer only to males, are as follows: Albania 53·3, Cyprus 55·8, Crete 78·0, Meligala 61·1, Mani 66·6.[1]

Parsons, in dealing with the British Isles, draws attention to the following facts. First that the males show greater variation; secondly that the females are darker than the males, in the British Isles the difference amounting to about 2 degrees; and thirdly, that where the men are fairest the discrepancy between the two series is greatest, while where the men are very dark, the discrepancy is quite small. These conclusions are strikingly confirmed by our Mediterranean figures. We have not included any very small series from Malta, and, therefore, we do not get some of the irregularities which Parsons attributes to small numbers.

The difference between Zurrico and the rest of Malta is very striking. It will be noticed that it is even greater than that between Malta and Gozo, and shows the Zurrico men to be markedly fairer, with the comparatively low index of 54·2. The urban districts, rural districts, and Siggewe all have an index that does not differ by more than the probable error. Gozo, both among the males and the females, has a higher index, *i.e.* a greater percentage of "darkness." The exact significance of these figures is at the present stage of our understanding of pigmentation in the Mediterranean area not easy to unravel. If we take comparative data it will be seen that the Cretans are considerably darker. This may be reasonably interpreted as suggesting a higher percentage of Mediterranean admixture. The Albanians appear to belong to a very different racial stock. As far as measurements go there is, on the whole, not very much resemblance between the people of Zurrico and those of Cyprus, although the appearance of both would suggest that they belong to the same racial stock. The resemblance between the Maniots and the Maltese, as far as pigmentation index is concerned, is very striking. When other measurements are considered, some resemblances appear, but there are certain very great differences. The Maltese and the Maniots are closely alike, not only in the proportions of the cranium, as represented by the cephalic index, but also in the absolute measurements of head length and head breadth. The facial and nasal measurements are, however,

[1] For absolute values see p. 166 of reference 38.

3: Buxton D-5 (1920-1921) 1922 EZ6 Malta EZ6

extremely different, due possibly to differences in environmental conditions or dietary habits.[1]

Pigmentation figures, then, seem to support a conclusion which had already been arrived at on other grounds, namely, the relationship between the Maltese and the mixed Armenoid population of the Eastern Mediterranean.

Coefficients of Correlation.

The coefficients of correlation which have been worked out refer only to those figures which are utilized for indices. Unfortunately some of the series are too small for this treatment. For the most part the coefficients of correlation do not suggest, in the four series of characters which were selected, any great differences. There is a significant difference between the correlation of the total facial height and the bizygomatic breadth in the male and female, a condition which is probably due to the more developed masticatory apparatus of the male. The difference between the correlations of head length and head breadth between the urban districts and Siggewe is of interest when we compare the means and the coefficients of variation of those measurements absolutely, and confirms to a certain extent our hypothesis that Siggewe possibly represents a local deviation from the normal Maltese type. Differences between the urban district females and the rural district females are found in four characters (total facial height, bizygomatic breadth, nasal height and nasal breadth) suggesting conditions one of which can be referred to food and the other to climate, but the absence of confirmatory evidence in the males makes it necessary to withhold any conclusions until further correlations have been worked out.

Looking at the figures generally, the correlated characters show remarkably little correlation, and the absence of real differences between the various groups goes far to suggest that the differences between the various parts of the archipelago are not in any way of fundamental importance.

The coefficients of correlation on the skulls are unsatisfactory, owing to the paucity of material. The extremely small correlation between glabello-occipital length and greatest breadth from the Chapel of Bones is of an unusual character. It can hardly be illusory when worked out on so large a series, but the explanation is not apparent from our present data.

VII.—Racial Problems.

The racial problems connected with Malta are extremely difficult to deal with, because they raise certain social questions. Historically the matter may be summarized briefly as follows.

[1] Both Meligala and Mani are situated in the Peloponnese.

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Table VII.—Pigmentation.

Hair Colour.

Absolute Figures.

Hair Colour.	♂						♀			
	U.D.	R.D.	Sig.	Zur.	Malta.	Gozo.	U.D.	R.D.	Malta.	Gozo.
Black	150	99	51	30	330	56	107	102	209	38
Brown	65	44	27	56	192	24	64	38	102	13
Fair	2	1	1	1	5	1	3	—	3	—
Total ...	217	144	79	87	527	81	174	140	314	51

Percentages.

Hair Colour.	♂						♀			
	U.D.	R.D.	Sig.	Zur.	Malta.	Gozo.	U.D.	R.D.	Malta.	Gozo.
Black	69·1	68·8	64·5	34·5	62·6	69·1	61·5	72·8	66·5	74·5
Brown	30·0	30·5	34·2	64·4	36·5	29·7	36·8	27·2	32·5	25·5
Fair	0·9	0·7	1·3	1·1	0·9	1·2	1·7	—	1·0	—
Total ...	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0

Eye Colour.

Absolute Figures.

Eye Colour.	♂						♀			
	U.D.	R.D.	Sig.	Zur.	Malta.	Gozo.	U.D.	R.D.	Malta.	Gozo.
Brown	121	82	37	58	298	58	136	100	245	38
Intermediate ...	71	41	34	16	162	15	32	24	56	6
Blue	43	31	8	13	95	8	15	12	27	7
Total ...	235	154	79	87	555	81	183	145	328	51

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TABLE VII.—PIGMENTATION—*continued.*

Eye Colour.	Percentages.									
	♂						♂			
	U.D.	R.D.	Sig.	Eur.	Malta.	Gozo.	U.D.	R.D.	Malta.	Gozo.
Brown	51·5	53·3	46·9	66·6	57·7	71·6	74·3	75·2	74·7	74·3
Intermediate ...	30·2	26·6	43·0	18·4	29·2	18·5	17·5	16·5	17·1	11·6
Blue	18·3	20·1	10·1	15·0	17·1	9·9	8·2	8·3	8·2	13·7
Total ...	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0